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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,339	07/10/2001	Naoto Kusumoto	07977-010004	8970

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EXAMINER

DOAN, THERESA T

ART UNIT PAPER NUMBER

2814

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/903,339

Applicant(s)

KUSUMOTO ET AL.

Examiner

Theresa T Doan

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 08/604,547.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (5,508,209) as previous cited.

Zhang et al. teach in figures 5A-5F a method of manufacturing a semiconductor device comprising the steps of:

forming an amorphous silicon semiconductor film 203 over a substrate 201;

irradiating the amorphous silicon semiconductor film with a second harmonic of a continuous wave laser comprising Nd which is an Nd:YAG laser to crystallize the amorphous semiconductor film (column 9, lines 3-10); and

Art Unit: 2814

patterning the crystallized semiconductor film 203 to form an active layer including at least a channel formation region (see figure 5C).

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 25-30 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17-21, 22-27, 34-43, 48-56 and 61-80 of U. S. Patent No. 6,204,099. Although the conflicting claims are not identical, they are not patentably distinct from each other because as follows: both U.S. Patent and instant application claimed a method of manufacturing a semiconductor layer comprises amorphous silicon. Moreover, the claims 61-80 in the U.S. No. 6,204,099 are either narrower version of the claims of the instant application or obvious variations thereof. For example, claims 63 and 68 in U.S. No. 6,204,099 "... said semiconductor film comprises amorphous silicon (claim 63)" and whereas claim 26 in the instant application claims "... wherein said amorphous semiconductor film comprises

Art Unit: 2814

amorphous silicon", that shows no different meaning between these two elements. The facts are that the claims of the U. S. Patent No. 6,204,099 and instant application have claimed the same goal and are not distinguished from each other.

Response to Arguments

5. Applicant's argument that Zhang does not specifically disclose the recited "second harmonic of a continuous wave laser comprising Nd". The argument is not persuasive because a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. Merck&Co. v. Biocraft Laboratories, 10 USPQ2d 1843 (Fed. Cir. 1989). Therefore, Zhang does teach irradiating the amorphous silicon semiconductor film with **a second harmonic of a continuous wave laser comprising Nd** which is an Nd:YAG laser to crystallize the amorphous semiconductor film. Specifically, Zhang states at column 9, lines 3-10 that "a second harmonic of the infrared laser", such as "a pulsed laser" or "a continuous oscillated laser", comprising "an Nd:YAG" can be used for irradiating.

6. Applicant's argument that the double patenting as it applies to U.S. Patent No. 6,204,099 is not deemed appropriate for the same reasons as advanced above in traversing the 103 rejection. The argument is not persuasive because Kusumoto et al. (U.S. Patent No. 6,204,099) teach "...laser beam is a second harmonic component of an Nd:YAG laser" (column 11, lines 42-43). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply "a linear laser", "a

Art Unit: 2814

pulsed laser" or "a continuous oscillated laser", comprising "an Nd:YAG" for irradiating in order to use the device in a particular application. Therefore, the double patenting as it applies to U.S. Patent No. 6,204,099 is still proper.

The rest of applicant's arguments, addressed to the amended claims are considered in the rejections shown above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T Doan whose telephone number is (703) 305-

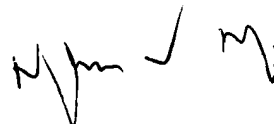
Art Unit: 2814

2366. The examiner can normally be reached on Monday to Thursday from 8:00AM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WAEL FAHMY can be reached on (703) 308-4918. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

TD
July 7, 2003



Ngan Van Ngo
Primary Examiner